

MUR820F THRU MUR860F

SUPER FAST RECTIFIERS

Reverse Voltage - 200 to 600 Volts Forward Current - 8.0 Amperes

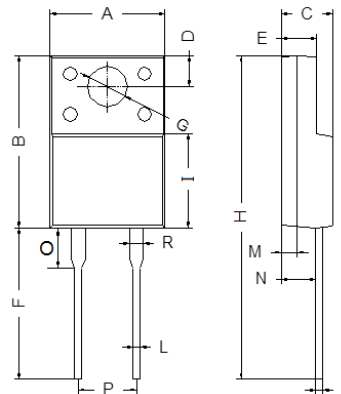
FEATURES

Low cost.
Low leakage.
Low forward voltage drop.
High current capability.
Easily cleaned with Alcohol, Isopropanol and Similar solvents.
The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

Case: TO-220F-2L
Molding Compound: UL Flammability Classification Rating 94V-0
Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208

TO-220F-2L



TO-220F-2L		
Dim	Min	Max
A	9.80	10.30
B	15.20	15.80
C	4.37	4.77
D	2.90	3.30
E	2.50	2.90
F	12.90	13.50
G	3.10	3.30
H	28.40	29.16
I	8.40	9.10
J	0.35	0.58
L	0.68	0.94
M	1.30	1.50
N	2.40	2.60
O	2.60	3.10
P	4.98	5.18
R	1.10	1.32

All Dimensions in mm



1 CATHODE 2 ANODE

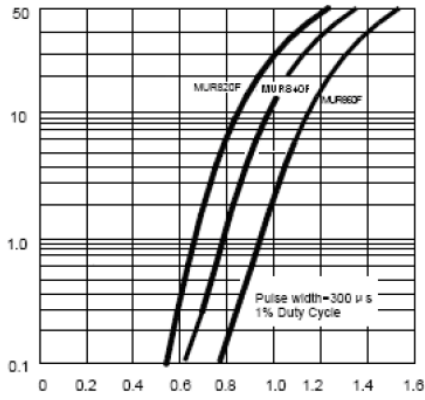
MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MUR820F	MUR840F	MUR860F	Unit
V_{RRM}	Reverse Peak Voltage	200	400	600	V
V_{RMS}	RMS Voltage	140	280	420	V
V_{DC}	DC Blocking Voltage	200	400	600	V
$I_{F(AV)}$	Average Forward Rectified Current @ $T_A=100^\circ\text{C}$	8.0			A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-sine-wave superimposed on Rsted Load	100			A
I_R	Reverse Current $V_R=V_{RRM}, T_A=25^\circ\text{C}$ $V_R=V_{RRM}, T_A=150^\circ\text{C}$	5.0 250	10 500		μA
V_F	Forward Voltage $I_F=8\text{A}$	0.98	1.30	1.50	V
t_{rr}	Reverse Recovery Time $I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25\text{A}$	25	50		ns
$R_{\theta JC}$	Typical Thermal Resistance Junction to Case	2			$^\circ\text{C/W}$
T_j, T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150			$^\circ\text{C}$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

INSTANTANEOUS FORWARD CURRENT
AMPERES

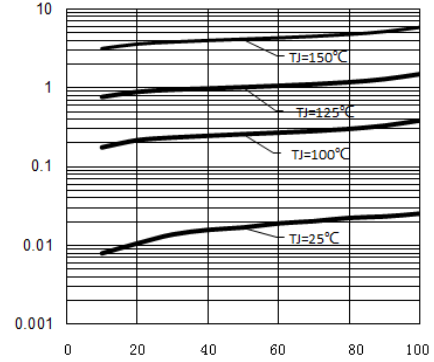
FIG.1 – TYPICAL FORWARD CHARACTERISTIC



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

INSTANTANEOUS REVERSE
CURRENT MICROAMPS

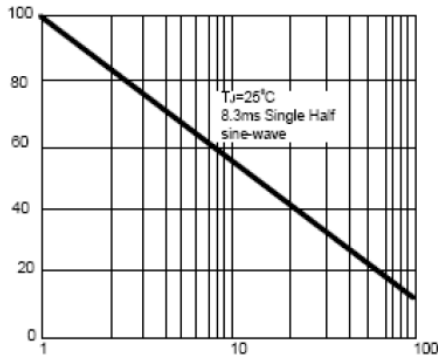
FIG.2 – TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE, %

PEAK FORWARD SURGE CURRENT
AMPERES

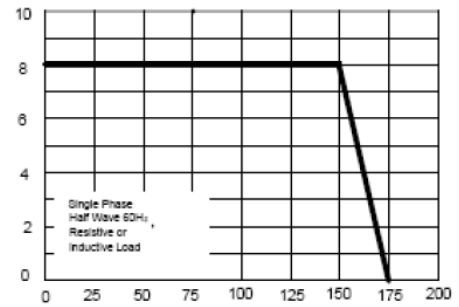
FIG.3 – PEAK FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60Hz

AVERAGE FORWARD CURRENT,
AMPERES

FIG.4 – FORWARD DERATING CURVE



CASE TEMPERATURE, °C